REMARKS

Status of the Claims

Claims 1-25 were in the application as filed.

Restriction to one of the sets of claims (a) 1-25 or (b) 22-25 was required by Examiner. By telephone conversation with Samuel H. Dworetsky on December 6, 2004, set (b) – claims 22-25 - was provisionally elected. This election to proceed with examination of claims 22-25 is hereby affirmed. Applicants expressly reserve the right to have claims 1-21 subject to examination in the further prosecution of this or a divisional application based on the present application. The following comments and arguments will, for the present, be restricted to the examination of claims 22-25.

Claims 22-25 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17-20 of copending application 09/910987 by Chen *et al.*

Claims 22-25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2002/0069278 to Forslow (hereinafter, "*Forslow*").

By this response, claims 1-21 are withdrawn, on the basis noted above. Claim 22 and is amended. Claims 22-25 remain in the application.

Arguments in support of patentability of claims remaining in the application

Provisional Double Patenting Rejection of Claims 22-25

Claims 22-25 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17-20 of copending application 09/910987 by Chen *et al.* This provisional rejection is respectfully traversed.

Initially, it will be recognized that claims 17-20 of 09/910987 are Network Interface Unit (NIU) apparatus or system claims, while the present claims 22-25 are method claims practiced at a NIU. Present claims 22-25 are thus distinguishable from claims 17-20 of 09/910987.

Further, the present application and 09/910987 are commonly owned. Importantly, the present application and 09/910987 were filed on the same date. Therefore, any patent issuing based on either of these applications will have the same potential expiration date. Applicants can file a terminal disclaimer to overcome any *non-*

provisional double-patenting rejection, once such a non-provisional rejection is asserted in one of the present application or 09/910987 – and provided any such rejection cannot be otherwise overcome. It appears that such a terminal disclaimer would be premature at the present time.

Further, by present amendments claim 22 (and claims 23-25 depending from claim 22) further distinguish over claims 17-20 of commonly owned application 09/910987. In particular, claims 17-20 of application 09/910987 do not recite

> A method practiced at a network interface unit (NIU) directly connected to at least one local area network (LAN), said NIU also being connected to a non-secure node of a second network, which second network is in packet communication with at least one access node of a secure virtual private network (VPN), the method comprising
> receiving data packets from at least one device on said at least one LAN ....

That is, claims 17-20 of 09/910987 do not recite "A method practiced at a network interface unit (NIU) *directly connected to at least one local area network (LAN)* .... [Emphasis added.]

Examiner's characterization of the limitations to claims 17-20 of 09/910987 as "similar to" the limitations of present claims 22-25 is insufficient to permit applicants to provide further distinctions.

Rejection of Claims 22-25 and Under 35 U.S.C. § 102(e)

Claims 22-25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Forslow. Claim 22 has been amended to more clearly define applicants' invention. Claims 23-25 depend from claim 22 and so include all of the limitations of claim 22 as amended. For the following reasons, it is submitted that claims 22-25 are patentable over Forslow.

Initially, even though Forslow and the present application use a somewhat similar vocabulary, they describe two very different network architectures. In a first sense, Forslow characterizes his system as a "*Network-Based* Mobile Workgroup System." [Emphasis added.] By contrast, applicants' inventive contribution relates to a Network Interface Unit (NIU) to be used with a local area network (LAN) (*e.g.*, home-office or telecommuter LAN), as described generally at page 9, lines 22-24.

As is made clear in Forslow in his [0026], his system "introduces modifications to the very base of how packets are routed over the Internet by a mobility routing protocol in the core of a mobile virtual private network together with using mobile IP at its edge."

In contradistinction:

(a) The present invention requires no such modifications to the "very base of how packets are routed over the Internet." The method of applicants' claim 22, as presently amended, is practiced at a network interface unit (NIU). Packets are not required to be processed differently *in the Internet.*

Examiner seeks to liken the routers 38 in Forslow's FIG. 3 to applicants' NIU. It is submitted that such a reading is contrary to the teachings of applicants' description of the NIU of the present invention. Forslow's routers 38 are specially configured to perform operations associated with mobility routing protocols.

Nevertheless, the language of claim 22 has been amended to make even clearer that the NIU at which applicants' inventive method is practiced is one that is "directly connected to at least one local area network (LAN), said NIU also being connected to a non-secure node of a second network, which second network is in packet communication with at least one access node of a secure virtual private network (VPN)."

Forslow's alleged "NIU" (actually a router equipped with mobility routing 50 protocols) 38 is part of a VPN (see Forslow [0093]). Router 38 therefore is not "directly connected to at least one local area network (LAN), said NIU also being connected to a non-secure node of a second network," where said NIU is "receiving data packets from at least one device on said at least one LAN." That is, element 38 (the special router) in Forslow is not directly connected to at least one local area network (LAN) and does not accomplish "receiving data packets from at least one device on said at least one LAN."

(b) No mobility routing protocol is required to practice applicants' claimed invention in the core of a mobile virtual private network, as is required in Forslow.

(c) No requirement for the use of Mobile IP (defined in Forslow's [0017] and [0050]) at its edge.

Use of such mobility modifications and extensions to the IP protocol and modifications of the "base of how packets are routed over the Internet" in Forslow distinguish the architectural and operational teachings of that reference from the present

invention of claims 22-25. A further perspective on the special character of these changes employed by Forslow and not used in the presently claimed invention is provided by a basic reference to Mobile IP published by the IETF RFC 2002 and available at http://www.ietf.org/rfc/rfc2002.txt?number=2002; this reference is cited in Forslow at [0050]. Other background references to the special Mobile IP (MIP) configurations and adaptations used by Forslow are provided by an IEEE tutorial by the editor of RFC 2002 at http://www.computer.org/internet/v2n1/perkins.htm. Other descriptions of MIP features and requirements are provided at http://www.tcpipguide.com/free/t_InternetProtocolMobilitySupportMobileIP.htm, and links provided in each of the last two URLs.

A general principle of Mobile IP networks is described in Forslow at [0027], where it is stated that

> ... Mobile IP is defining a home agent as the anchor point with which the mobile client always has a relationship, and a foreign agent, which acts as the local tunnel-endpoint at the access network where the mobile client is visiting. Depending on which subnetwork the mobile client is currently visiting its point of attachment may change. At each point of attachment, mobile IP either requires the availability of a standalone foreign agent or the usage of a co-located care-of address in the mobile client itself.

The invention of present claims 22-25 require no such "home agent – foreign agent" pairs. If employed in the present invention they would perform unnecessary functions.

Operationally, the "reference network" of Forslow's FIG. 3 includes VPN 18 comprising routers 38 linked to mobile clients 20. Routers 38 are clearly network-based elements providing authentication and security functions for mobile clients 20.

By way of contrast, the network interface 102 in FIG. 1 of the present application is a user device that acts as an authentication proxy and secure router for *client end-points* (*e.g.*, FIG. 1 elements 104-110). NIU 102 as claimed in presently amended claim 22 is indicated as being "directly connected to at least one local area network (LAN)." The segment 101 seen by client end-points is a physically secure LAN; the clients need have

no special capabilities for authentication or security for "receiving data packets from at least one device on said at least one LAN."

For the foregoing reasons, it is submitted that claim 22, as presently amended, is clearly distinguishable and therefore patentable over Forslow.

Claims 23-25 include all of the limitations of claim 22 and are therefore patentable over Forslow for the same reasons.

References cited, but not applied, have been reviewed and found not to be any more relevant than the references presently applied - either alone or in combination with themselves or the references that were applied.

Conclusion

For the foregoing reasons, it is respectfully submitted that claims 22-25 remaining in the application, as presently amended, overcome or avoid all bases for rejection and are allowable. It is requested that all claims be further examined, found allowable and passed to issue.

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Respectfully,

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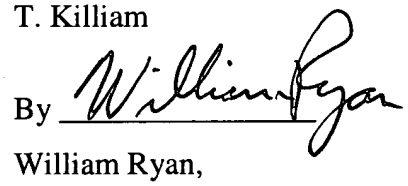
By 

Date: May 16, 2005

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